



NASA Policy Directive

NPD 7900.4B

Effective Date: April 27, 2004

Expiration Date: April 27, 2009

COMPLIANCE IS MANDATORY[Printable Format \(PDF\)](#)

Subject: NASA Aircraft Operations Management**Responsible Office: Aircraft Management Division**

1. POLICY

- a. This directive establishes policy for the management of NASA aircraft resources, aircraft operations, aviation safety, and related matters.
- b. All NASA aircraft operations shall meet approved programmatic needs or mission management requirements, shall be duly authorized, and shall be accomplished in airworthy aircraft operated by qualified flight crews in accordance with approved NASA and Federal guidelines, regulations, and operational procedures. Specific policy regarding the use of NASA and non-NASA aircraft is provided in Attachment A.
- c. NASA aircraft are Agencywide resources, available to support all NASA programs and missions. NASA aircraft are also Federal resources, and may be made available to other Federal agencies in support of their missions.
- d. Policies and procedures shall be established by affected NASA Centers for initiation, review, approval, and implementation of all flight programs. Procedures shall be established at each Center and aircraft operations facility, including Headquarters, to comply with NASA aircraft management policies as established in this document and in NPR 7900.3.
- e. All aviation-related NASA contracts and agreements must require compliance with NASA aviation safety program requirements and aircraft management policies.
- f. NASA shall take all necessary actions to prevent loss of life, personal injury, property loss, mission failure, or test failure.

2. APPLICABILITY

This NPD is applicable to NASA Headquarters, NASA Centers, including Component Facilities, the Jet Propulsion Laboratory, to NASA contractors operating NASA aircraft as specified in their contracts, to grantees operating NASA aircraft as specified in their grants, and to partners under agreements, such as Memorandums of Agreement or cooperative agreements. Any aircraft when owned, bailed, leased, loaned, chartered, rented, or operated under grant by NASA is considered a NASA aircraft.

3. AUTHORITY

42 U.S.C. § 2473(c)(1), Section 203(c)(1) of the National Aeronautics and Space Act of 1958, as amended.

4. REFERENCES

- a. 41 CFR Part 102-33, Management of Government Aircraft (Federal Management Regulation).
- b. 41 CFR Part 301-2, Temporary Duty (TDY) Travel Allowances (General Services Administration).
- c. OMB Circular A-126, Improving the Management and Use of Government Aircraft.
- d. NPR 7900.3, Aircraft Operations Management.
- e. NPD 8700.1, NASA Policy for Safety and Mission Success.
- f. NPD 8710.2, NASA Safety and Health Program Policy.

g. NPR 8715.3, NASA Safety Manual.

5. RESPONSIBILITY

a. The Assistant Administrator (AA) for Institutional and Corporate Management is responsible for ensuring that the Administrator is kept fully informed of significant matters relating to NASA aviation, and for ensuring that these policies are in compliance with applicable Federal guidelines.

b. The Assistant Administrator (AA) for Institutional and Corporate Management has the authority to establish policies for aircraft management, including acquisition, utilization, operation, maintenance, modification, control, and disposition, and to approve aircraft acquisition and transfer requests, designate aircraft classifications, review and concur on aircraft contracts, and assign aircraft to the appropriate Center. Assignments of an aircraft to the appropriate Center are a joint responsibility between the AA for Institutional and Corporate Management and the AA funding the aircraft program.

c. The Assistant Administrator (AA) for Institutional and Corporate Management is responsible for the operation of the mission management aircraft assigned to NASA Headquarters.

d. The Director, Safety and Assurance Requirements Division, is the focal point for aviation safety oversight. The Director is responsible to the Associate Administrator, Office of Safety and Mission Assurance, for establishing aviation safety policy and overseeing its implementation through verification of effective aviation safety programs throughout the Agency.

e. The Enterprise Associate Administrators (EAA) are responsible for establishing mission requirements and funding to support those requirements. They shall coordinate with the Office Institutional and Corporate Management when establishing program or project plans that involve the acquisition, reassignment, utilization, or disposition of an aircraft. EAAs with Institutional Program Officer roles are responsible for ensuring effective aircraft operations management and implementation of aviation safety programs by implementing the policies and guidance developed by the Aircraft Management Office (AMO). With the support of the AMO, the EAA shall continually review aircraft requirements, costs, and the overall effectiveness of aircraft operations that support their requirements.

f. The Assistant Administrator, Office of External Relations, is responsible for providing the interface between NASA and elements of the Department of Defense (DoD), for providing policy guidance and coordination for NASA international activities, and is responsible for requesting aircraft flight clearances from foreign governments through the Department of State.

g. The Director, AMO, Office of Institutional and Corporate Management, is responsible for functional leadership, staff support to the Administrator, and central services as they relate to aircraft management. The Director, AMO is the Agency focal point for aviation operations, aircraft management issues, and the aviation safety program. On such matters, the AMO is the Agency's liaison to the Federal Aviation Administration, DoD, the General Services Administration, the Interagency Committee for Aviation Policy, other Government agencies, and to industry. The Director, AMO is responsible for developing policies governing the management of NASA aircraft including aircraft operations, aircraft maintenance, aviation training, airworthiness, flight readiness reviews, cost effectiveness, and implementation of Federal regulations and policies. The Director, AMO, is responsible for the implementation of NASA aviation safety policy developed by the Office of Safety and Mission Assurance. The Director, AMO, shall coordinate the Headquarters review and evaluation of proposed acquisitions, classifications, assignments, and dispositions of NASA aircraft, and shall recommend approval of proposed actions to the AA for Institutional and Corporate Management. The Director, AMO, shall ensure that adequate reviews of all NASA flight operations are conducted to ensure that NASA aircraft management policies are followed. All Headquarters-generated contracts or agreements that include aviation operations shall be reviewed and concurred with by the AA for Institutional and Corporate Management prior to contract award.

h. The NASA Intercenter Aircraft Operations Panel (IAOP) is responsible for providing assistance, counsel, and recommendations to the AA for Institutional and Corporate Management, other NASA Senior Management Officials, and the Aircraft Management Office concerning Agency policies and any other matters related to NASA aircraft operations.

i. Center Directors are responsible for ensuring the safe, efficient, and effective operation of all aircraft assigned to their Centers. Center Directors are responsible for implementing actions and instructions necessary to comply with NASA policy on aircraft management and aviation safety; for ensuring that flight objectives and flight resources meet program requirements; and for reporting aircraft costs and performance metrics in accordance with Office of Management and Budget and NASA procedural requirements. Center Directors shall establish a flight operations office that shall be responsible for performing the functions of an Aircraft Manager, an Aviation Safety Officer, a Chief of Maintenance, a Chief of Engineering (when aircraft modifications are routine), and a Chief of Quality Assurance. The functions of the Aircraft Manager and Aviation Safety Officer are inherently governmental and shall be performed by civil service personnel. Center Directors have the authority to approve aircraft charters or short-term (30 day) aircraft leases, and to approve acquisition of aircraft to be used solely for spare parts, for wind tunnel models, or as static displays. Center Directors with responsibility over NASA airfields and helipads will ensure

that those airfields are managed, maintained, and utilized in a safe, effective, and cost-efficient manner.

j. A program-independent flight operations office, the specific purpose of which will be to plan, organize, direct, and control the operations, maintenance, modification, safety, and support of all Center-assigned or -contracted aircraft, will be established. This office will be responsible for all Center-assigned or -contracted aircraft. The head of this office shall be the senior line manager that is responsible for aviation activities at the Center and shall be assigned the resources, authority, and responsibility necessary to manage and conduct safe, effective, and efficient operations in accordance with NASA directives, guidance, and other applicable Federal regulations. Any Center contract or agreement, which includes aviation operations, will be reviewed and concurred with by the head of this office prior to contract award.

k. Managers at all levels are responsible for supporting the safe conduct of aircraft operations that involve their programs or personnel. Managers who write aviation contracts shall be responsible for coordinating those contracts with the Center's aircraft management office to ensure compliance with the NASA aviation safety program and aircraft management policies.

l. The Center contracting office shall coordinate all aircraft and service contracts with the Center's aircraft management office.

m. The designated pilot-in-command is responsible for the conduct and safety of the flight and is the final authority concerning the safe operation of the aircraft and all safety aspects of the flight.

6. DELEGATION OF AUTHORITY

None.

7. MEASUREMENTS

a. The Director, AMO, in the Office of Institutional and Corporate Management, shall provide an annual report to the AA for Institutional and Corporate Management, which shall include an Agencywide aircraft inventory, a summary on the utilization of each aircraft in relation to the programs it supports, a consolidated summary of the performance measurements used and provided by each Center, and aviation safety statistics.

b. The IAOP Operations Review Program shall be used to measure each Center's flight operations activities with NPR 7900.3A, Aircraft Operations Management.

8. CANCELLATION

NPD 7900.4A, NASA Aircraft Operations Management, dated February 25, 1999.

/s/ Sean O'Keefe
Administrator

ATTACHMENT A: (TEXT)

Attachment A. POLICY ON THE USE OF AIRCRAFT TO SUPPORT NASA REQUIREMENTS.

Background: NASA has a responsibility to ensure that all aircraft, which conduct flight operations under NASA authority, meet approved airworthiness and operational safety standards.

General Policy: All NASA-conducted or NASA-sponsored aviation operations, including research or scientific projects that use aviation assets, are to be evaluated and approved by the NASA airworthiness and aircraft management organizations at the Center that is responsible for those projects (home Center).

Basing Conditions: If a flight project is conducted by a NASA Center other than the home Center, a written agreement shall be created between the two Centers' flight operations offices. If a flight project is managed by a home Center that has no flight operations office, support from another Center's flight operations office is required and shall be coordinated by the Aircraft Management Office (AMO) through the Enterprises and the Intercenter Aircraft Operations Panel (IAOP).

Risk Analysis: The home Center's flight operations office shall ensure that a sufficiently detailed risk analysis of the flight program/project is conducted. The analysis must evaluate the flight parameters of the program, the airworthiness of the aircraft, the capability of the aircraft to meet flight requirements, and the background and experience level of the operators. The analysis should also consider whether the personnel onboard are mission crew or flight crew, whether the equipment is unique, high-value science equipment or standard production

equipment, and whether the demands placed on the operator expose it to risks beyond its capability to manage.

Review of Contracts and Agreements: Each Center flight operations office shall review all aviation-related contracts and other written agreements of that Center for compliance with NASA aviation safety program requirements prior to the award or execution of the contract or agreement. The initial aviation program analysis shall be done during the planning stage prior to issuing a Request for Proposal (for contractual arrangements) or entering into other binding agreements. The home Center flight operations office shall evaluate the capabilities of the final candidate operators prior to the final selection.

NASA Flight Programs: NASA flight programs shall be conducted under guidelines that vary depending upon who owns or operates the aircraft:

1. NASA-owned aircraft or NASA-operated aircraft: Any aircraft owned or operated by NASA shall be subject to two distinct review processes:

a. Center's airworthiness certification process. Ensures that all modifications made to the aircraft are airworthy and that an aircraft is certified as safe for flight.

b. Center's mission or flight readiness review process. Ensures that research flight requirements pose no unacceptable operational risks. If the NASA aircraft is operated by a NASA Center other than the owning Center, responsibilities for flight safety, airworthiness, and mission review shall be established by a written agreement between or among the respective Center flight operations organizations.

2. NASA-owned, military-operated: If a NASA aircraft is operated for NASA by the U.S. military, the owning NASA Center's flight operations office shall conduct a risk analysis to determine whether NASA or military standards for airworthiness, operations, maintenance, and safety are the most applicable and comply with those standards. Responsibilities shall be established by written agreement between the military unit operating the aircraft and the flight operations office at the NASA Center owning the aircraft.

3. Military-owned and military-operated: If NASA equipment or personnel are required to be aboard a military-owned and -operated research or research-support aircraft that is operated at a NASA Center, responsibilities and tasks shall be established by written agreement between the military unit with operational responsibility for the aircraft and the flight operations office at the NASA Center where the flight operations are to be conducted. Such flight operation shall be subject to review by the IAOP. If the operation is not conducted at a NASA Center, the agreement shall be signed by the head of flight operations at the Center that manages the project.

4. Federal or state agency-owned and agency-operated: If the aircraft is owned by another Federal or state agency (including state universities) and operated for (but not by NASA), the Federal or state agency must conform to the following requirements.

a. The Federal or state agency must have a formal aviation program with written standards which describe a complete flight program, including management, administration, operations, maintenance, modifications, airworthiness, safety, and training. Those standards must be related to and address the risks associated with the types of operations that the aircraft will perform.

b. The flight operations office at the NASA Center that is responsible for the flight project shall conduct the risk analysis and evaluate the capabilities of the operator. If that Center has no flight operations office, support from another Center's flight operations office is required. The AMO shall coordinate the evaluation and analysis through the Enterprises and the IAOP.

c. If the Federal or state agency's operation has been previously evaluated by an Interagency Committee for Aviation Policy (ICAP) Aviation Resource Management Survey (ARMS) Team, the Center flight operations office may use the results of that survey for its evaluation.

d. If the Federal or state agency is expected to provide long-term, continuous support (greater than 1 year), the agency's aviation program shall be subject to the IAOP review process in the same manner as NASA Centers.

5. Contractor-owned and contractor-operated: If the aircraft is owned by a contractor and operated for NASA under a Federal Aviation Administration (FAA) Operating Certificate (such as Federal Aviation Regulation [FAR] Part 119, 121, 125, 133, 135.) as a civil aircraft, the aircraft shall be operated in accordance with the appropriate FARs and within the limitations imposed by the FAA Operating Certificate or Certificate of Authority. Prior to contract award, a risk analysis of the final candidates shall be conducted by the flight operations office at the NASA Center that manages the contract. The risk analysis shall include a review of the terms of the contract, the risks to NASA, the hazards associated with the proposed flight operation, the airworthiness of the aircraft, and the capabilities of the contractor. The results of the risk analysis shall be incorporated into the contractor selection process. At least one NASA flight operations officer shall be a member of the selection board or team. If the Center has no flight operations office, support from another NASA flight operations office shall be coordinated by the AMO through the Enterprises and the IAOP. If the contract is expected to provide long-term, continuous support (greater than 1 year), the aviation program shall be subject to the IAOP review process in the same manner as NASA Centers.

- a. If the contractor's aircraft has an FAA Standard Airworthiness Certificate with appropriate maintenance/configuration documentation showing satisfactory condition, and if the risk analysis permits, the reviewers may accept the condition of the aircraft as documented.
 - b. If the aircraft has a Limited or Restricted Category Certificate, the operation must be restricted to the limitations imposed by the certificate, and if the risk analysis permits, the reviewers may accept the condition of the aircraft as documented.
 - c. If the aircraft has a temporary Experimental or Provisional Certificate over a standard Airworthiness Certificate, the configuration and airworthiness of the specific experimental system must be reviewed and approved by the Center's airworthiness certification board.
 - d. If the contractor-owned aircraft has no FAA certificate, the aircraft configuration and airworthiness must be reviewed and approved by a formal NASA airworthiness certification program.
6. Other civilian or foreign non-contract aircraft: Occasional or short-term use of aircraft that includes high-value equipment or NASA personnel onboard including NASA contractors, must be evaluated and approved by the flight operations office at the Center responsible for the project. If that Center has no flight operations office, support from another Center's flight operations office is required. This review should be commensurate with the scope of the planned activity and shall be approved by the chief of the flight operations office performing the review and forwarded to the AMO.

Click on link below to retrieve Table of Conditions.

Table of Acronyms

AFSRB -Airworthiness Flight Safety Review Board

AW - Airworthiness

FAA - Federal Aviation Administration

FRR - Flight Readiness Review

IAOP - Intercenter Aircraft Operations Panel (NASA)

ICAP - Interagency Committee for Aviation Policy (Federal)

MOA - Memorandum of Agreement

(URL for Graphic)

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